

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (original): Gas discharge lamp, specifically a HID lamp, more specifically a metal halide lamp, most specifically a metal halide lamp with an aspect ratio greater than 3 or even 4, comprising:

a discharge chamber having walls sealingly enclosing the discharge chamber;

two electrodes arranged in the discharge chamber opposite each other, for burning an arc therebetween;

the discharge chamber containing a saturated system comprising an excess amount of salt, such as for instance metal halides, such that during operation of the lamp, a salt pool of melted salt will be present inside the discharge chamber;

the lamp being designed such that, when the lamp is operative in a vertical orientation, the location of the salt pool is close to the top of the discharge chamber.

Claim 2 (original): Gas discharge lamp according to claim 1, wherein the coldest spot is close to the top of the discharge chamber.

Claim 3 (original): Gas discharge lamp according to claim 1 or 2, wherein the lamp is designed such that, when the lamp is operative in a vertical orientation, an arc heats the ceiling of the discharge chamber to a lesser extent than the bottom or lower cap of the discharge chamber.

Claim 4 (original): Gas discharge lamp according to claim 3, wherein the lower electrode has a point-to-bottom distance that is smaller than the point-to-bottom distance of the upper electrode.

Claim 5 (original): Gas discharge lamp according to claim 4, wherein the lower electrode has a point-to-bottom distance in the order of 0-5 mm.

Claim 6 (original): Gas discharge lamp according to claim 1 or 2, preferably also according to any of claims 3-5, wherein the lamp is designed such that heat output

close to the ceiling of the discharge chamber is greater than the heat output close to the bottom of the discharge chamber.

Claim 7 (original): Gas discharge lamp according to claim 6, wherein one or more upper lamp components are designed such that their heat transportation capacity is larger than the heat transportation capacity of the corresponding lower lamp components.

Claim 8 (original): Gas discharge lamp according to claim 6 or 7, further comprising electrode conductors sealingly extending through wall sections of the discharge chamber, wherein the electrode conductor of the top electrode is thicker than the electrode conductor of the lower electrode.

Claim 9 (original): Gas discharge lamp according to any of claims 6-8, further comprising electrode conductors sealingly extending through wall sections of the discharge chamber, wherein the electrode conductor of the top electrode is made from a material having a larger

heat transportation capacity than the material of the electrode conductor of the lower electrode.

Claim 10 (original): Gas discharge lamp according to any of claims 6-9, wherein a wall section of the discharge chamber close to the top electrode is thicker than a wall section of the discharge chamber close to the lower electrode.

Claim 11 (original): Gas discharge lamp according to any of claims 6-10, wherein a wall section of the discharge chamber close to the top electrode is made from a material having a larger heat transportation capacity than the material of a wall section of the discharge chamber close to the lower electrode.

Claim 12 (original): Gas discharge lamp according to any of claims 6-11, wherein the lamp is provided with additional heat discharge means located at the upper end of the discharge chamber.

Claim 13 (original): Gas discharge lamp according to claim 12, wherein said additional heat discharge means

comprise suitably configured fins, and/or wherein said additional heat discharge means comprise a radiation layer.

Claim 14 (original): Gas discharge lamp according to any of claims 6-13, wherein the lamp is provided with heat transfer inhibiting means located at the lower end of the discharge chamber.

Claim 15 (original): Gas discharge lamp according to claim 14, wherein said heat transfer inhibiting means comprise a heat shield which is located close to the electrode conductor of the lower electrode and preferably surrounds this electrode conductor, and/or wherein said heat transfer inhibiting means comprise a heat shield which is located close to a lower portion of the discharge chamber and preferably surrounds this lower portion.

Claim 16 (canceled)

Claim 17 (canceled)

Claim 18 (canceled)

Claim 19 (canceled)

Claim 20 (currently amended) : The gas discharge lamp  
of claim 1, Lamp assembly comprising a bulb and a lamp  
arranged inside the bulb, the lamp being designed  
according to claim 1 or 2, preferably also according to  
any of claims 3-5 and/or according to any of claims 6-15  
and/or according to any of claims 16-19,  
wherein the lamp assembly is provided with additional  
heat generating means located close to one end of the  
discharge chamber.

Claim 21 (currently amended) : The lamp of assembly  
according to claim 20, wherein said additional heat  
generating means comprises ing a radiation coil.

Claim 22 (currently amended) : The lamp of assembly  
according to claim 21, comprising a pair of electrically  
conductive lamp supports supporting the lamp and  
supplying power to the lamp, wherein the radiation coil  
is also powered by the said lamp supports.